Remarks

The present amendment responds to the Official Action dated November 25, 2003. The Official Action rejected claims 1-14 under 35 U.S.C. §102(b) as being anticipated by Frey et al. U.S. Patent No. 5,557,513 ("Frey"). This sole ground of rejection is addressed below following a brief discussion of the present invention to provide context.

Independent claims 1, 4, 6, and 9 have been amended according to general suggestions made by the Examiner in a telephone interview summarized below. Claims 11 and 12 have been canceled without prejudice. Claims 15-22 have been newly added to cover certain aspects of the present invention. Newly added independent claims 16 and 20 are directed to computer readable-medium aspects of the present invention. Claims 1-22 are presently pending.

The Present Invention

The present invention relates generally to a method and apparatus for storing retail performance metrics (RPMs) of activities which take place at a point of sale (POS) terminal, and more particularly, to such a method and apparatus wherein the RPMs are stored in a standardized record format.

In one aspect of the present invention, the RPM is determined by recording the time the POS system began waiting for an input event during a retail transaction in an entry record. Upon receiving input, the RPM type is determined based on what kind of input is received by the system. For example, the RPM type may be the scan of an item, the weighing of an item, tender of payment, and the like. An RPM record, including the time and type of input recorded, is

stored in a transaction log associated with the transaction entry. RPMs are recorded for a plurality of input events which occur during a transaction. Thus, the techniques of the present invention allow a retailer to accumulate a detailed transaction log of all the events occurring at each POS terminal in order to identify deficiencies and potential cashier performance problems. For example, a record of a series of scans requiring an inordinate amount of time may indicate a cashier who needs more training or a scanner which needs cleaning or repair.

In another aspect of the present invention, the method may be used to evaluate the performance of alternative hardware component upgrades attached to the POS station. For example, two bar code scanners may be compared by considering the scanned barcode identification times rather than having the measure confused with other times not directly associated with the scanner such as key input time. During preliminary tests conducted by the inventors, for example, similar POS stations were configured to use the present invention. The stations differed only in the scanner used to scan products. Subsequent analysis of the recorded RPM data revealed a twelve percent difference in the scan times of the two stations indicating that one terminal performed better than the other. This information gathered by the present invention allows the retailer to make better decisions regarding hardware and software purchases and configuration and planning for POS terminals. See, page 26, line 10 et seq.

Interview Summary

The Examiner is thanked for the courtesy of a telephone interview concerning the above case on January 23, 2004.

In the telephone call, claim 1 was discussed along with the relied upon art of Frey. Although no claim amendments were agreed to, the Examiner made three general suggestions independent of the relied upon art for amending claim 1. First, the Examiner suggested clarifying the claims in order to indicate how the system performs a performance evaluation of a cashier. Second, the Examiner suggested indicating the type of events which result in input being received by the computer implemented method. Third, the Examiner suggested specifying one or more fields within the entry record being recorded.

Claim 1 has been amended in accordance with these suggestions. First, claim 1 has been amended to direct the computer implemented method claim towards evaluating the performance of a cashier. In addition to the preamble, the providing step of "providing the recorded entries to evaluate the performance of the cashier operating the POS station" has been added. Second, the event occurring at a POS station has been clarified to be either "a scan operation, a weighing operation, a key operation, or a tender operation." Third, claim 1 has also been amended to include "a time stamp" within the entry record. See also claims 4, 6, and 9.

As required by MPEP §713.04, please enter this Interview Summary into the application file.

The Art Rejections

All of the art rejections hinge on the application of Frey. As addressed in greater detail below, Frey does not support the Official Action's reading of it and the rejections based thereupon should be reconsidered and withdrawn. Further, the Applicant does not acquiesce in the analysis of Frey made by the Official Action and respectfully traverses the Official Action's analysis underlying its rejections.

The Official Action rejected claims 1-14 under 35 U.S.C. 102(e) as being anticipated by Frey. Frey is entitled "Checkout Lane Alert System and Method for Stores Having Express Checkout Lanes." Frey describes a system which monitors the number of shoppers entering and leaving a store. Using statistical modeling techniques and data gathered earlier, Frey's system then predicts shopper traffic at checkout lanes in the store. Thus, a store manager can assign more cashiers to the checkout stations in a preemptive move, rather than allowing lines of waiting customers to grow. While Frey does indicate that the POS system registers each transaction and records the time of each transaction, Frey explicitly states that a transaction is defined as "a single buyer checking out through a checkout lane, and not by the number of purchases" by each buyer. Col. 6, lines 3-6. In other words, Frey appears to be concerned only with the fact a transaction occurred, and not with events that occur during a transaction. Thus, Frey's approach could not be used to measure the performance of a cashier operating a POS station with respect to scanning products, weighing products, receiving payments, or keying input to the POS station as presently claimed. Although the Frey approach when interpreted broadly may suggest a performance measure of number of customers a cashier may serve, it does not

address granular retail performance metrics which advantageously areas with a transaction where a cashier needs improvement and perhaps additional training.

In contrast to Frey, one aspect of the present invention provides techniques for evaluating the performance of a cashier operating a POS station. Upon operation of a task such as scanning a bar code, weighing a product, keying a code to the POS station, receiving tender from the customer, and the like, an input is received by the present invention to indicate the occurrence of such an event. An entry record in response to the received input is typically recorded. A retail performance metric (RPM) and an RPM type is determined based on the received input. An RPM record is then recorded which includes the RPM, the RPM type, and the time elapsed waiting for and receiving the input. This RPM record is stored for each event of a plurality of events occurring during a transaction at a POS station. Claim 1, as presently amended, reads as follows:

> 1. (currently amended): A computer implemented method for evaluating the performance of a cashier operating a point of sale (POS) station, comprising the steps of:
>
> receiving an input indicative of an event occurring at the POS station, wherein the event occurring at the POS station is a scan operation, a weighing operation, a key operation, or a tender operation;
>
> recording an entry record in response to the input received, the entry record including a time stamp;
>
> determining a retail performance metric and a retail performance metric type based on the input received at the POS station;
>
> recording a retail performance metric record including the retail performance metric and the retail performance metric type during a transaction, the retail performance metric including the time elapsed waiting for and receiving the input;
>
> associating the retail performance metric record with the entry record;
>
> repeating the steps of receiving an input, determining a retail performance metric, recording the retail performance metric record for another event during the transaction, and associating the retail performance metric record with the entry

record; and

storing the retail performance metric records associated with the entry record for utilization in evaluating the performance of the cashier operating the POS station. (emphasis added)

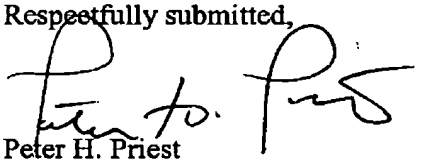
Thus, for example, a POS station may record the time waiting for the scan of each item, the time required to weigh each item requiring weighing, the time for the customer to tender payment, and the like. These records are then available for store management to review the performance of a cashier. Frey, in contrast, simply records the time at which a customer checks out.

Nothing in the cited reference indicates a recognition of the problems addressed by the present invention. To sum up, the claims of the present invention are not taught, are not inherent, and are not obvious in light of the art relied upon.

Conclusion

All of the presently pending claims, as amended, appearing to define over the applied references, withdrawal of the present rejection and prompt allowance are requested.

Respectfully submitted,



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